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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/815,891	03/31/2004	Todd Schneider	881-011758-US (PAR)	9081
2512	7590	12/24/2008	EXAMINER	
PERMAN & GREEN 425 POST ROAD FAIRFIELD, CT 06824			FAULK, DEVONA E	
			ART UNIT	PAPER NUMBER
			2614	
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			12/24/2008	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/815,891	Applicant(s) SCHNEIDER ET AL.	
	Examiner DEVONA E. FAULK	Art Unit 2614	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 18 November 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,3-10,12-20 and 29-41 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 10-20 and 29-41 is/are allowed.
- 6) ☒ Claim(s) 1 and 3-9 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 21 March 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Remarks

1. Claims 1,3-10,12-20,29-41 were indicated as allowable in the previous office action.
2. Claims 2,11,21-28, are cancelled.
3. The indicated allowability of claims 1,3-9 are is withdrawn in view of the newly discovered reference(s) to 101. Rejections based on the newly cited reference(s) follow.
4. Applicant's request for reconsideration of the finality of the rejection of the last Office action is persuasive and, therefore, the finality of that action is withdrawn.

Claim Objections

5. Claims 1,3-9 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 101, set forth in this Office action.

Claim Rejections - 35 USC § 101

Claim(s) **1,3-9** is/are rejected under 35 U.S.C. 101 as not falling within one of the four statutory categories of invention. Supreme Court precedent¹ and recent Federal Circuit decisions² indicate that a statutory “process” under 35 U.S.C. 101 must (1) be tied to another statutory category (such as a particular apparatus), or (2) transform underlying subject matter (such as an article or material) to a different state or thing. While the instant claim(s) recite a series of steps or acts to be performed, the claim(s)

¹ *Diamond v. Diehr*, 450 U.S. 175, 184 (1981); *Parker v. Flook*, 437 U.S. 584, 588 n.9 (1978); *Gottschalk v. Benson*, 409 U.S. 63, 70 (1972); *Cochrane v. Deener*, 94 U.S. 780, 787-88 (1876).

² *In re Bilski*, 88 USPQ2d 1385 (Fed. Cir. 2008).

neither transform underlying subject matter nor positively tie to another statutory category that accomplishes the claimed method steps, and therefore do not qualify as a statutory process. Each limitation of the method claims must be tied to another statutory category, i.e. each limitation of the method claims must be tied to a means or apparatus that performs the function.

Allowable Subject Matter

6. Claims 10,12-20,29-41 are allowed.

Regarding claims 10,18,34 and 36 prior art Brennan discloses a method of providing protection again acoustic shock, the method comprising the steps of:

performing a pattern analysis on an input signal in a time domain, including: at an oversampled analysis filterbank, transforming the input signal to a plurality of band signals in a frequency domain, and performing a feature extraction from the input signal and performing a feature extraction from the plurality of band signals to identify a parameter space corresponding to a signal space of the input signal (analysis filterbank 26 performs a pattern analysis on an input signal, Figure 1; column 4, lines 41-52);applying a rule-based decision to the parameter space to detect an acoustic shock event (inherent in digital signal processor 34; processor 34 determines gain adjustments based on characteristics of the frequency band signals and determines when those adjustments need to be made, column 10, lines 23-29 and 37-47; since a determination is made as to when gain adjustments need to be made, it is inherent that the levels of the input signals have to be detected and are one of the characteristics that

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determine when adjustments are to be made and this reads on the claim language as recited with the rule-based decision being whatever is used to make the decision that the gain needs to be adjusted); and removing the acoustic shock event (signal processor 34, Figure 1 determines gain adjustments which read on removing the acoustic shock event, Figure 1; column 10, lines 23-37 and 37-47). Prior art Amano (US 5,136,577) discloses transforming an input signal into a plurality of oversampled sub-band signals in a frequency domain (division and decimation process part 2, Figures 4 and 5; column 8, lines 44-67); adaptively processing the sub-band signals to remove an acoustic shock event (echo canceller group 4, Figure 5; the echo being the acoustic shock event that is removed; column 8, lines 60-column 9, line 2); and combining the processed sub-band signals to generate the output signal (synthesis filter 72, Figure 5; column 9, lines 12-15).

Regarding claim 10, the prior art or combination thereof fails to disclose or make obvious determining a shock flag based on each of the input signal and band signal feature extractions and removing the acoustic shock based on the shock flags.

Regarding claim 18, the prior art or combination thereof fails to disclose or make obvious determining a shock flag based on each of the input signal and band signal feature extractions and performing gain control based on the shock flags and the features extracted from the input signal and the band signals.

Regarding claims 34 and 36, the prior art or combination thereof fails to disclose or make obvious delaying the input signal to the WOLA analysis to allow time to obtain fast

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broadband features to aid in the interpretation of the WOLA analysis results and performing gain control based on features extracted from the input signal and the band signals.

Claims 12-17,19,20,29-33,35 and 37 are allowed due to dependency on claims 1,7,10,18,34 and 36.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to DEVONA E. FAULK whose telephone number is (571)272-7515. The examiner can normally be reached on 8 am - 5 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vivian Chin can be reached on 571-272-7848. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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/Devona E. Faulk/
Examiner, Art Unit 2614